





## US 220 Project Planning Study From I-68 to Cresaptown via US 220 and MD 53

### Informational Public Workshop Display Boards Presented

Wednesday, December 9, 2015

5:30 PM - 8:00 PM

Belair Elementary School (Gymnasium) 14401 Barton Blvd SW Cumberland, MD 21502







# WE WANT YOUR FEEDBACK TONIGHT!

- Are the right issues being addressed by the alternatives?
- Is there need to address localized traffic operations or accommodate regional traffic?
- Which alternatives are most promising?
- Which alternatives should be dropped from further consideration?
- Are there any other good ideas that SHA has not yet presented?







# GET THE MOST OUT OF THIS WORKSHOP

- Tonight's workshop is self-paced. No formal presentation will be given.
- Team members will be available at all stations to respond to your project-related questions and receive your comments.
- The project team has adjusted the preliminary alternatives and developed new alternatives/ options which contain 'Practical Design' elements.
  - What is Practical Design? Practical Design focuses on addressing an area's most important needs at a reasonable cost and in a safe manner. The project team focuses on the core purpose and need. This approach allows SHA to deliver projects more efficiently.
- You may provide written comments by submitting a comment card tonight or returning the card by mail at your convenience.

WE WANT YOUR FEEDBACK!

YOUR OPINION MATTERS!



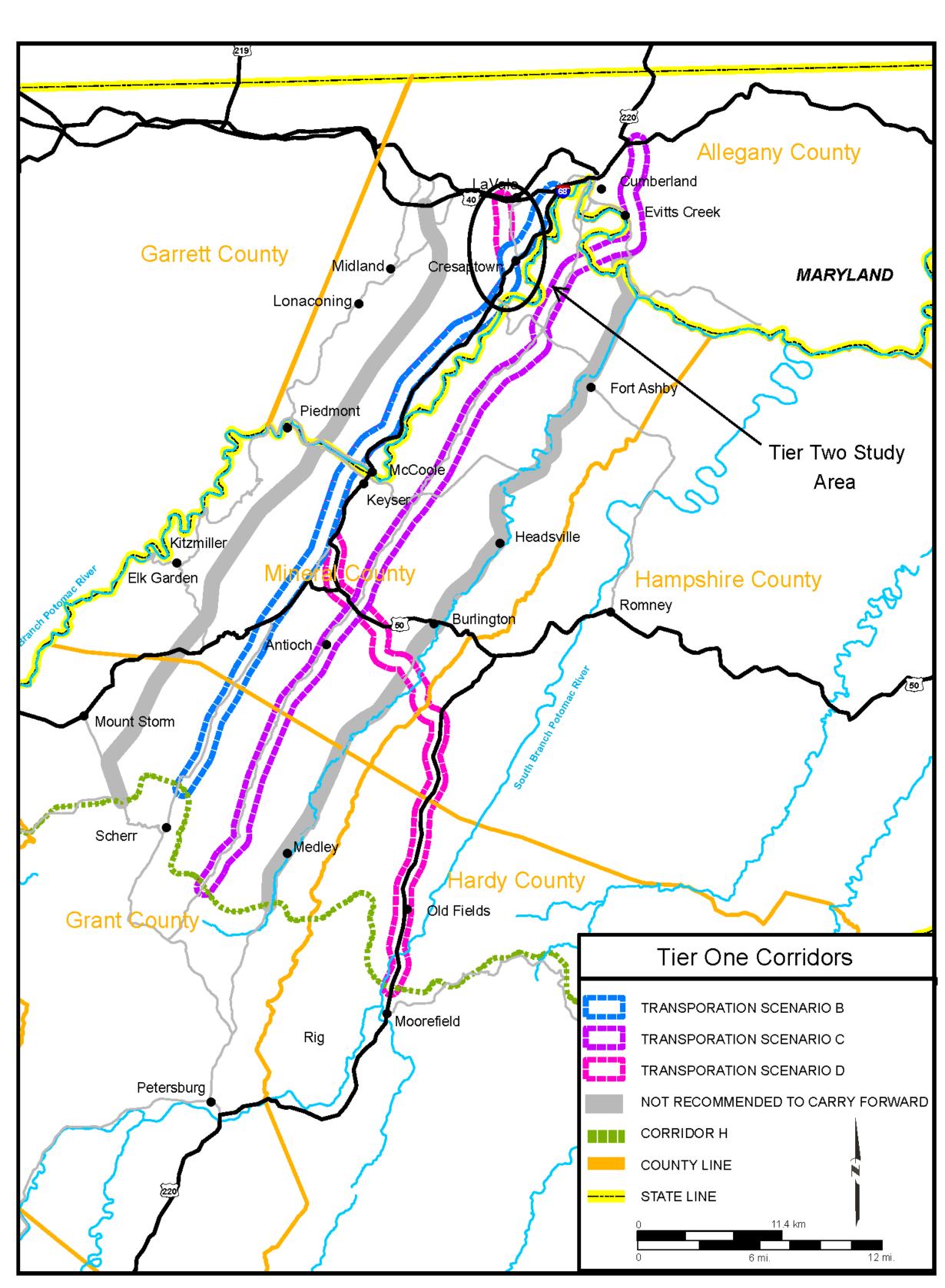




## PROJECT BACKGROUND

 US 220 Corridor Planning Study (Tier One) initiated in coordination with West Virginia in 2006

- Location / Design Public Hearings held in September 2011
- Preferred Corridors Selected: Corridor B (US 220 within Maryland), with a northern Corridor D spur (MD 53)
- Record of Decision received on July 21, 2014
- Current Study (Tier Two): I-68 to Cresaptown (along US 220 and MD 53) is the first segment selected and programmed for a detailed project planning study
  - Public Informational Workshop held November 13, 2014









# PROJECT PURPOSE

- Upgrade the existing transportation system for residents, businesses, and visitors along US 220 and MD 53 by:
  - Increasing mobility
  - Increasing safety for vehicles, pedestrians, and bicyclists
  - Improving efficiency for local/regional commerce
  - Providing sufficient transportation infrastructure to support economic growth

### PROJECT NEED

- Address roadway geometric deficiencies that limit mobility and cause safety concerns
- Support economic development through increased accessibility between economic centers
- Improve the regional transportation network through system linkage

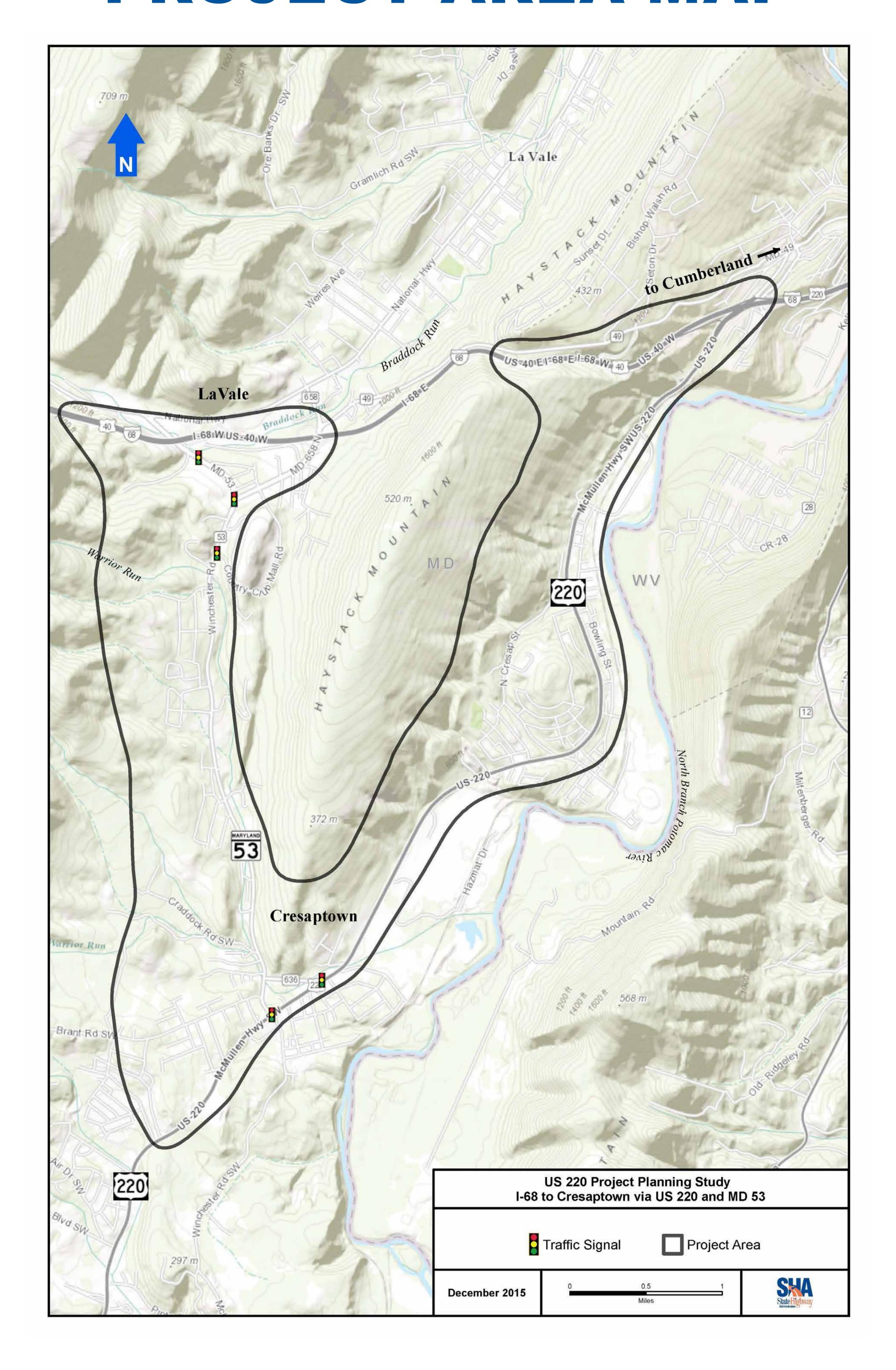
Note: The project is consistent with local and regional master plans







# PROJECT AREA MAP









# TRAFFIC: AVERAGE ANNUAL DAILY TRAFFIC (AADT) and ROADWAY SEGMENT LEVELS OF SERVICE (LOS)

		2013 Existing LOS		2040 No-	2040 No-Build & Alt. 2 LOS		2040 Alt. 3a,	2040 Alt. 3A and 3B LOS		2040 Alt. 4	2040 Alt. 4 LOS		2040 Alt.	2040 Alt. 5 LOS	
Segment	2013 AADT	AM Peak	PM Peak		AM Peak	PM Peak	Alt. 3b AADT	AM Peak	PM Peak	AADT	AM Peak	PM Peak	5 AADT	AM Peak	PM Peak
Northbound US 220 from North of MD 636 to South of I-68		С	С	1 ( 100	С	С	15 215	В	В	0.670	В	В	0.240	В	В
<b>Southbound US 220</b> from South of I-68 to North of MD 636	14,600	В	С	16,100	В	С	15,215	В	C	9,670	A	В	9,340	A	В
Northbound US 220 from South of MD 53 to North of MD 636	19,000	В	В	23,600	В	В	17,625	В	В	8,665	В	В	12,130	В	В
<b>Southbound US 220</b> from North of MD 636 to South of MD 53	19,000	C	D		C	Е		C	C		A	A		A	В
Northbound US 220 (Relocated) from North of US 220 (old) to I- 68		A A									N. I.	Not Applicable			
Southbound US 220 (Relocated) from South of I-68 to North of US 220 (old)	Not applicable  14,115  A  A										Not Applicable				
Northbound MD 53 from North of MD 636 to South of I-68	10 600	В	В	21,500	В	В	19,695	В	В	14,135	В	В	7,405	A	A
<b>Southbound MD 53</b> from South of I-68 to North of MD 636	19,600	A	В		A	В		A	A		A	В		A	A
Northbound MD 53 from North of US 220 to North of MD 636	10,000	A	A	11,100	A	A	10,005	A	A	7,530	A	A	4,765	A	A
<b>Southbound MD 53</b> from North of MD 636 to North of US 220	10,000	A	A	11,100	A	В		A	A		A	A		A	A
Northbound MD 53 (Relocated) from North of US 220 (old) to MD 636 Extended	om North of US 220 (old) to D 636 Extended									18,985	A	A			
Southbound MD 53 (Relocated) from South of MD 636 Extended to North of US 220 (old)	Not Applicable								10,703	Α	Α				







# TRAFFIC

#### AM Peak Hour Signalized Intersection Levels of Service (LOS) and \*Delays

	AM PEAK HOUR										
Signalized Intersections	2013 Existing		2040 No Build and Alternative 2		2040 Alternative 3A and Alternative 3B		2040 Alternative 4		2040 Alternative 5		
	LOS	Delay*	LOS	Delay*	LOS	Delay*	LOS	Delay*	LOS	Delay*	
US 220 at MD 636	C	26	С	28	С	22	В	18	В	16	
US 220 at MD 53	C	21	С	24	В	13	В	13	A	5	
US 220 Old at US 220 New	_	_	_	_	_	_	В	19	_	_	
US 220 Old at MD 53 New	_	_	-	_	_	_	_	_	В	19	
MD 53 at Shopping Center	A	4	A	10	A	6	A	7	A	8	
MD 53 at MD 658	C	28	C	32	C	31	C	28	C	35	
MD 53 at Country Club Mall	A	3	A	7	A	3	A	3	A	4	
MD 53 New at MD 658 Extended	_	_	-	_	_	_	-	-	В	12	
MD 658 at WB I-68 ramps	В	17	В	17	В	17	C	20	C	22	
MD 658 at EB I-68 ramps	В	14	В	14	В	14	В	17	В	15	
MD 658 at Linda Way	C	20	C	24	C	20	С	22	C	21	

<sup>\*</sup>Delay represents seconds per vehicle

#### PM Peak Hour Signalized Intersection Levels of Service (LOS) and \*Delays

	PM PEAK HOUR										
Signalized Intergrations			2040 No Build and		2040 Alternative 3A		2040 Alternative		2040 Alternative		
Signalized Intersections	2013 Existing		Alternative 2		and Alternative 3B		4		5		
	LOS	Delay*	LOS	Delay*	LOS	Delay*	LOS	Delay*	LOS	Delay*	
US 220 at MD 636	C	26	C	31	C	29	C	21	В	15	
US 220 at MD 53	D	43	D	39	В	16	В	11	A	5	
US 220 Old at US 220 New	-	-	-	_	_	-	C	28	-	-	
US 220 Old at MD 53 New	_	_	_	_	_	-	-	_	C	29	
MD 53 at Shopping Center	A	5	В	11	В	12	В	12	В	19	
MD 53 at MD 658	C	30	C	34	C	34	C	31	C	33	
MD 53 at Country Club Mall	A	3	A	7	A	7	A	4	A	4	
MD 53 New at MD 658 Extended	_	_	-	-	_	-	I	-	В	12	
MD 658 at WB I-68 ramps	В	20	В	18	В	17	В	18	В	20	
MD 658 at EB I-68 ramps	В	15	В	14	В	14	В	15	В	14	
MD 658 at Linda Way	C	21	C	24	C	24	C	24	C	24	

<sup>\*</sup>Delay represents seconds per vehicle



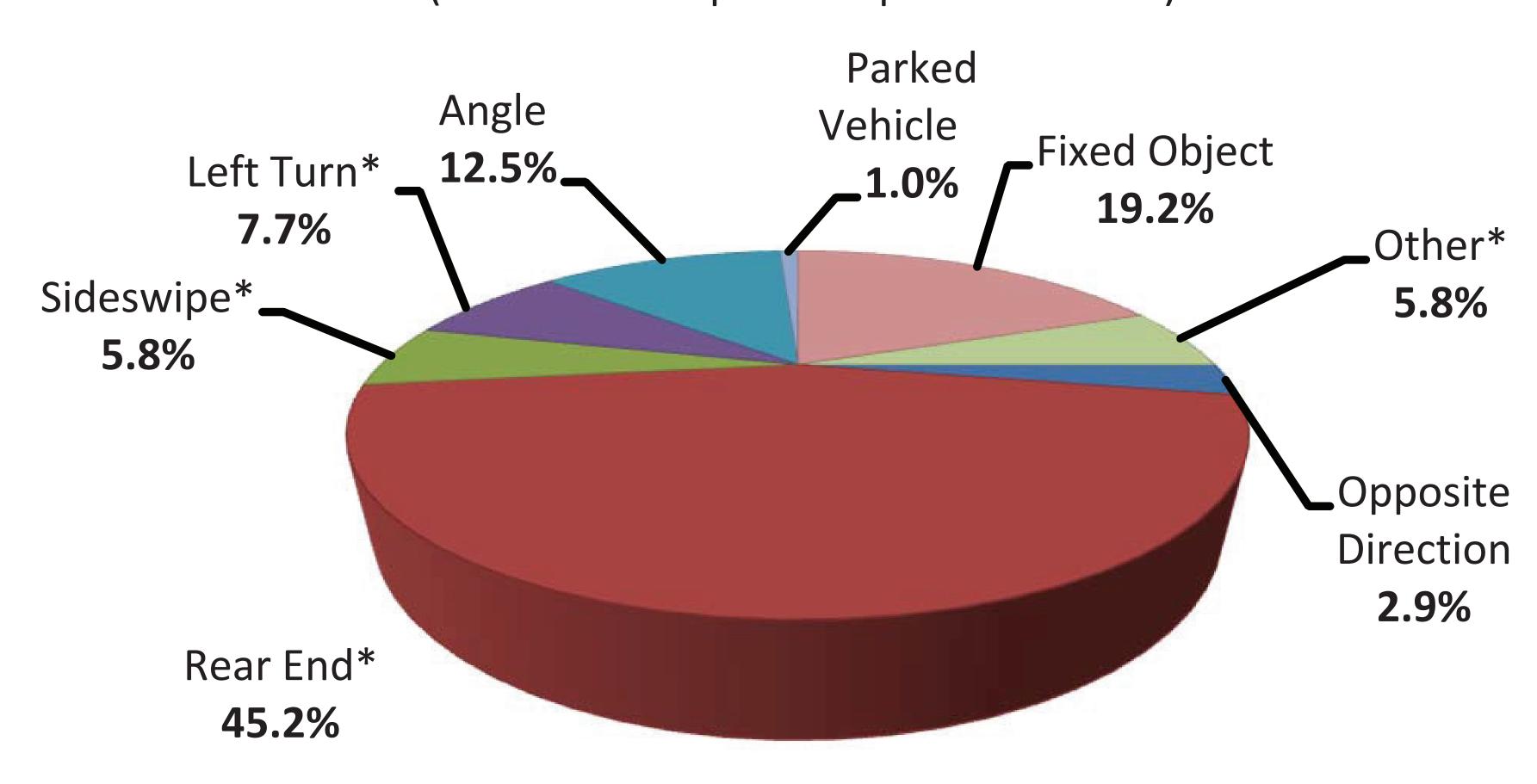




# SAFETY SUMMARY 2010 - 2012

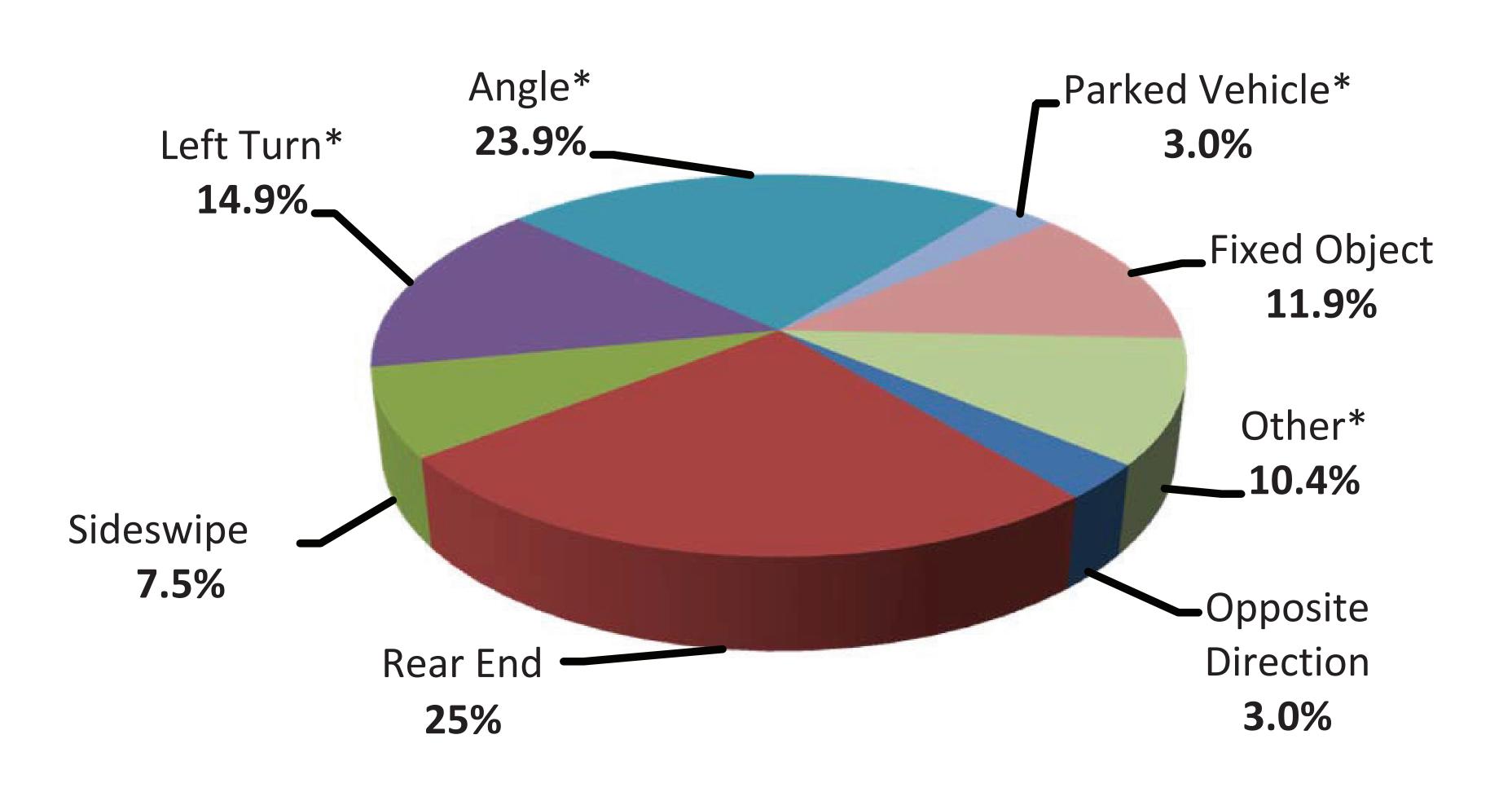
### US 220 (McMullen Highway)

(based on 104 police-reported crashes)



### MD 53 (Winchester Road)

(based on 67 police-reported crashes)



\*Crash types significantly higher than statewide average for similar types of highways

- The major crash types reported are: opposite direction, rear end, sideswipe, left turn, angle, pedestrian, parked vehicle, fixed object, truck related, and other crashes. Other is a catch-all category that includes crashes not among the major crash types (i.e., U-turns, overturned vehicles, etc.)
- Truck-related crashes accounted for 9% of the overall total for US 220 and for 18% of the overall total for MD 53







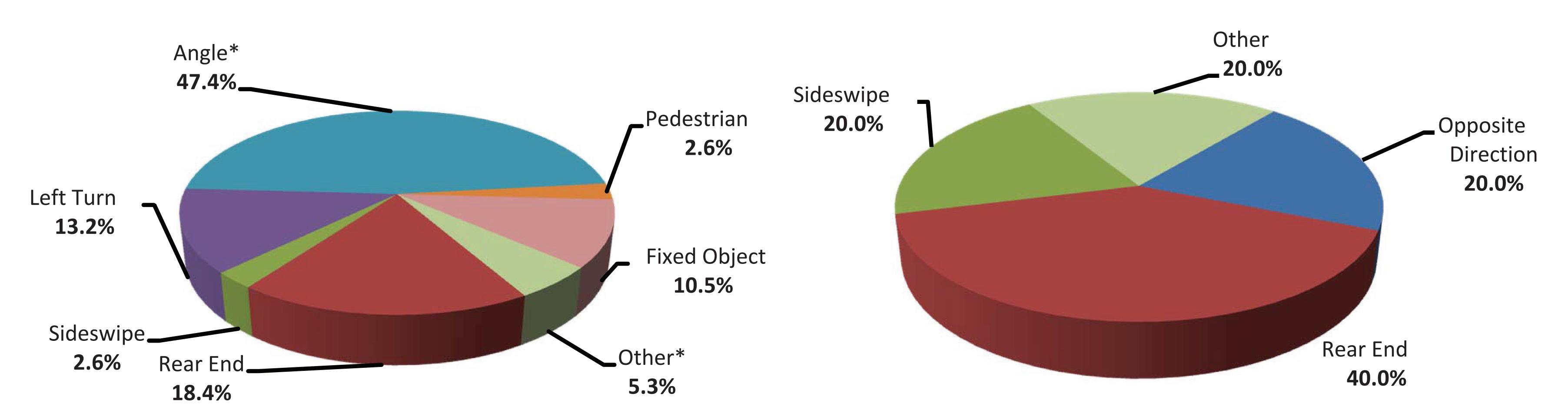
# SAFETY SUMMARY 2010 - 2012

#### MD 658 (Vocke Road)

(based on 38 police-reported crashes)

### MD 636 (Warrior Drive)

(based on 5 police-reported crashes)



\*Crash types significantly higher than statewide average for similar types of highways

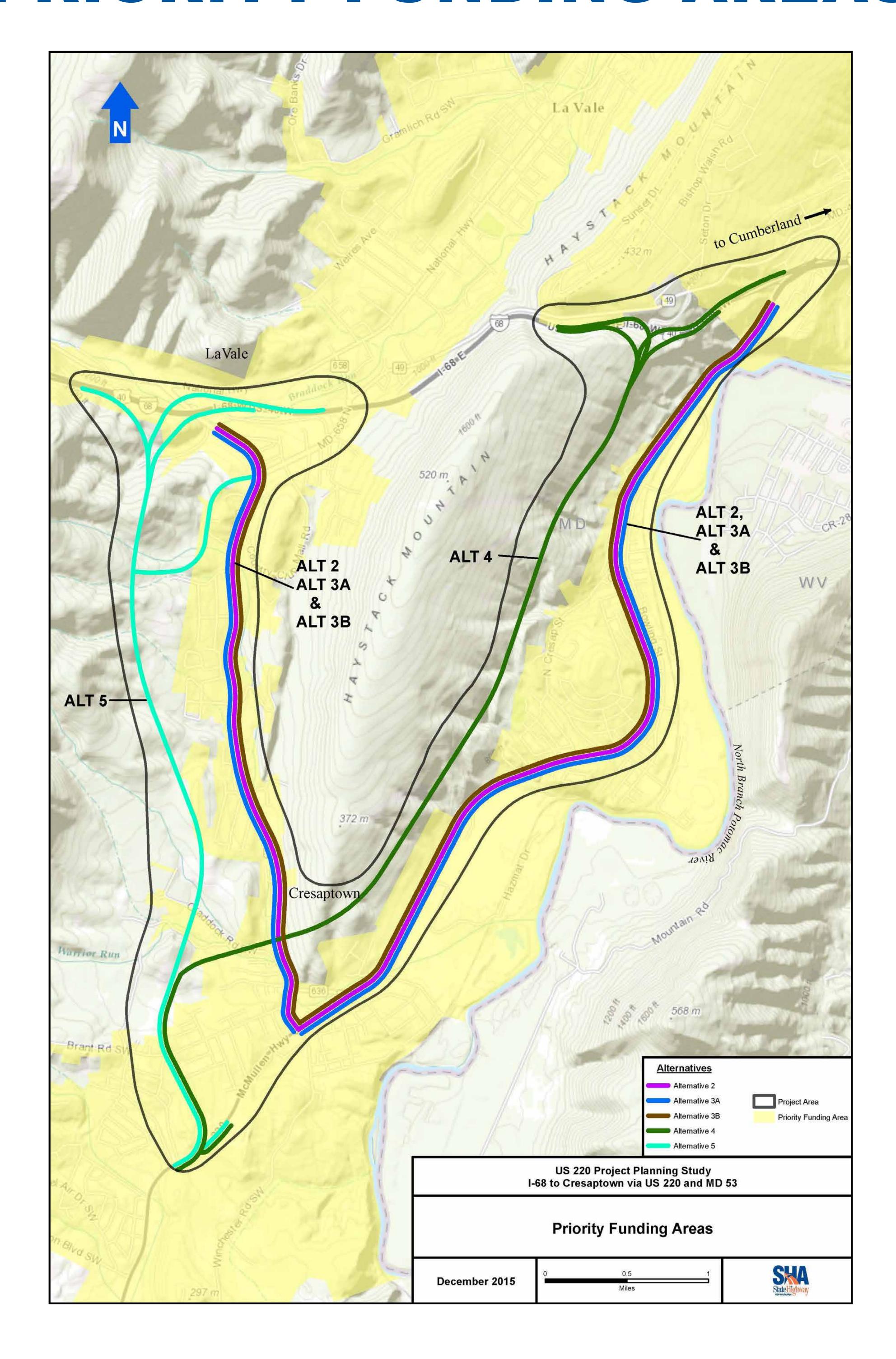
- The major crash types reported are: opposite direction, rear end, sideswipe, left turn, angle, pedestrian, parked vehicle, fixed object, truck related, and other crashes. Other is a catch-all category that includes crashes not among the major crash types (i.e., U-turns, overturned vehicles, etc.)
- Truck-related crashes accounted for 8% of the overall total for MD 658 and for 40% of the overall total for MD 636







# PRIORITY FUNDING AREAS

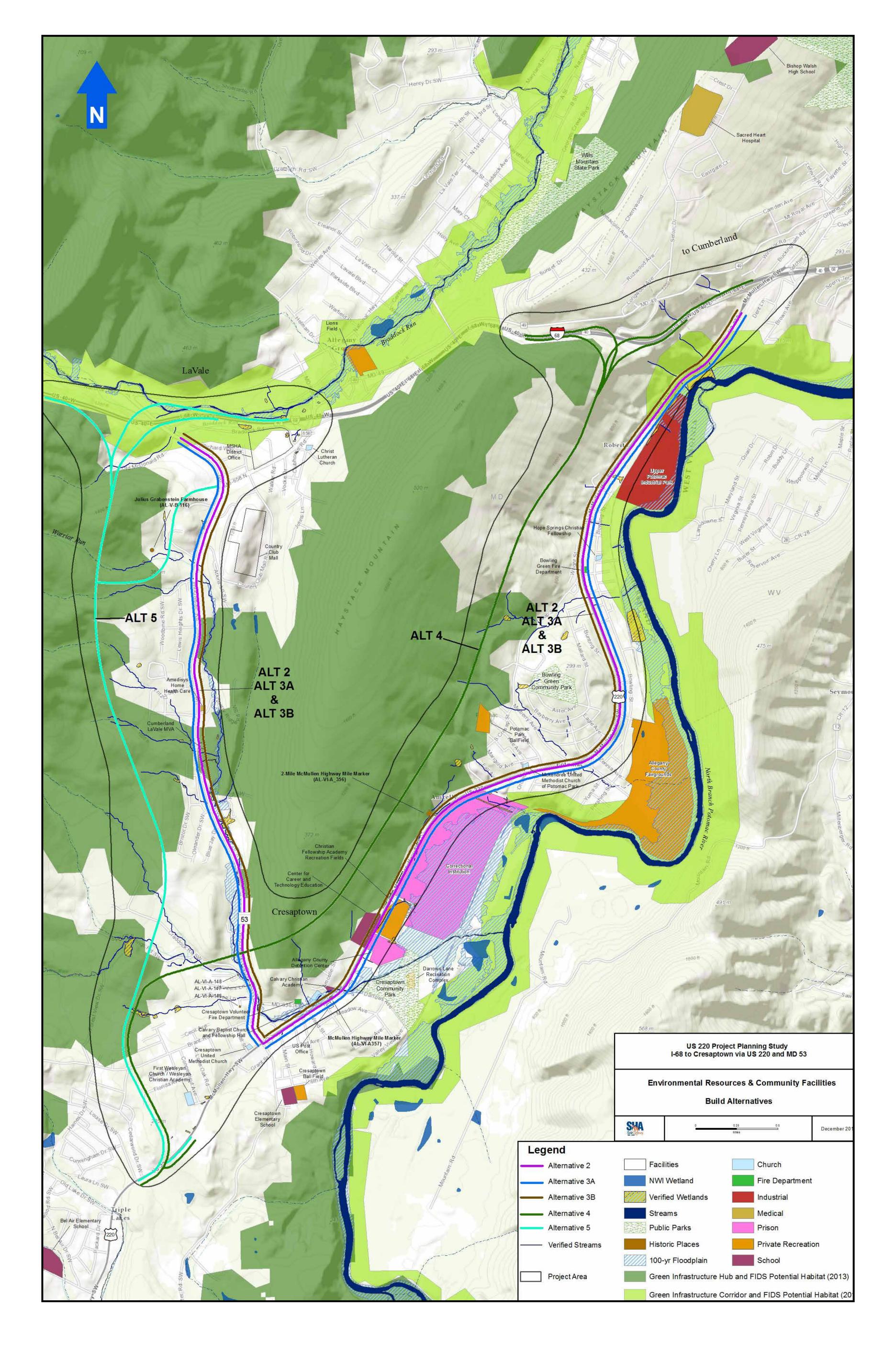








# ENVIRONMENTAL FEATURES AND COMMUNITY FACILITIES

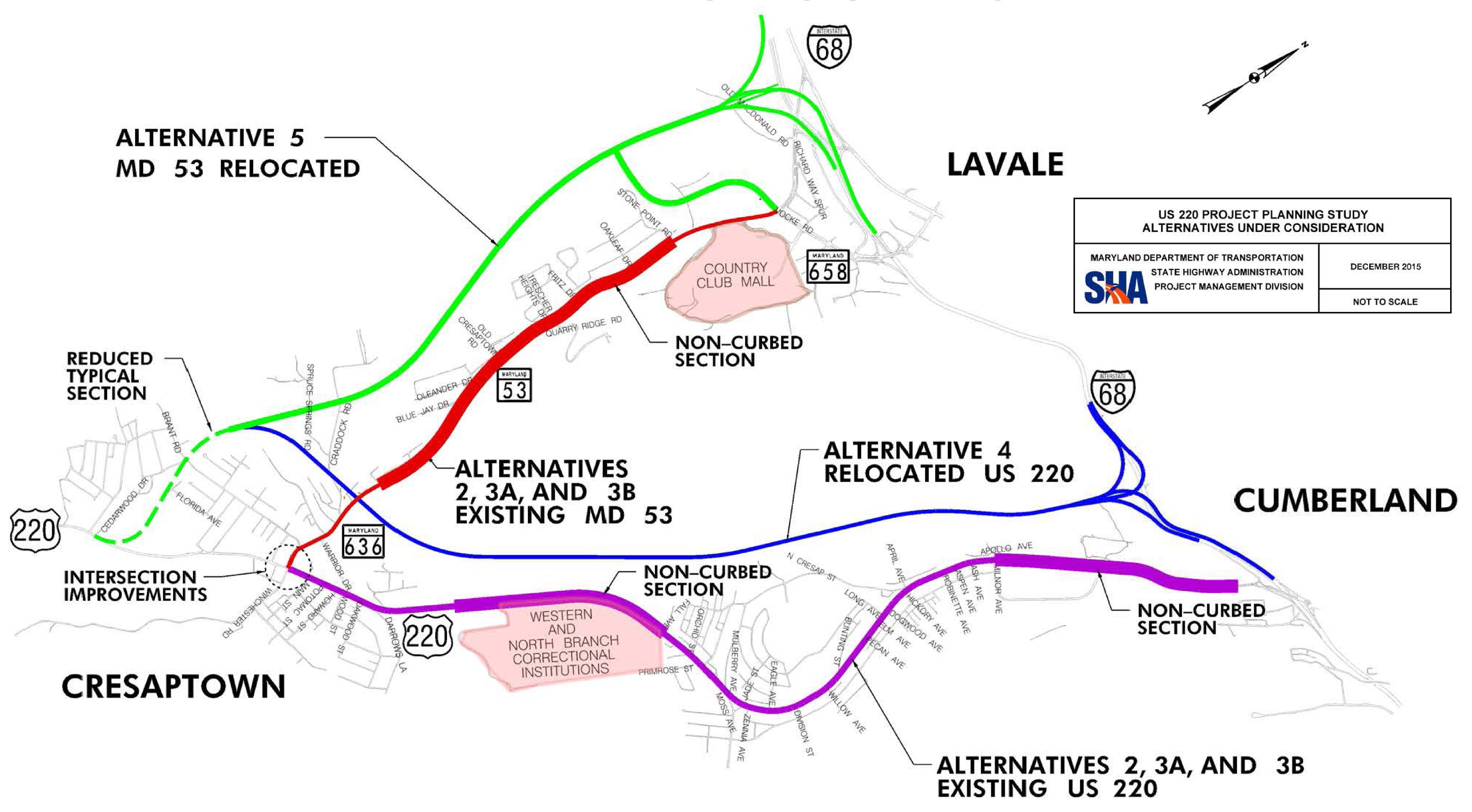








# ALTERNATIVES LOCATION MAP

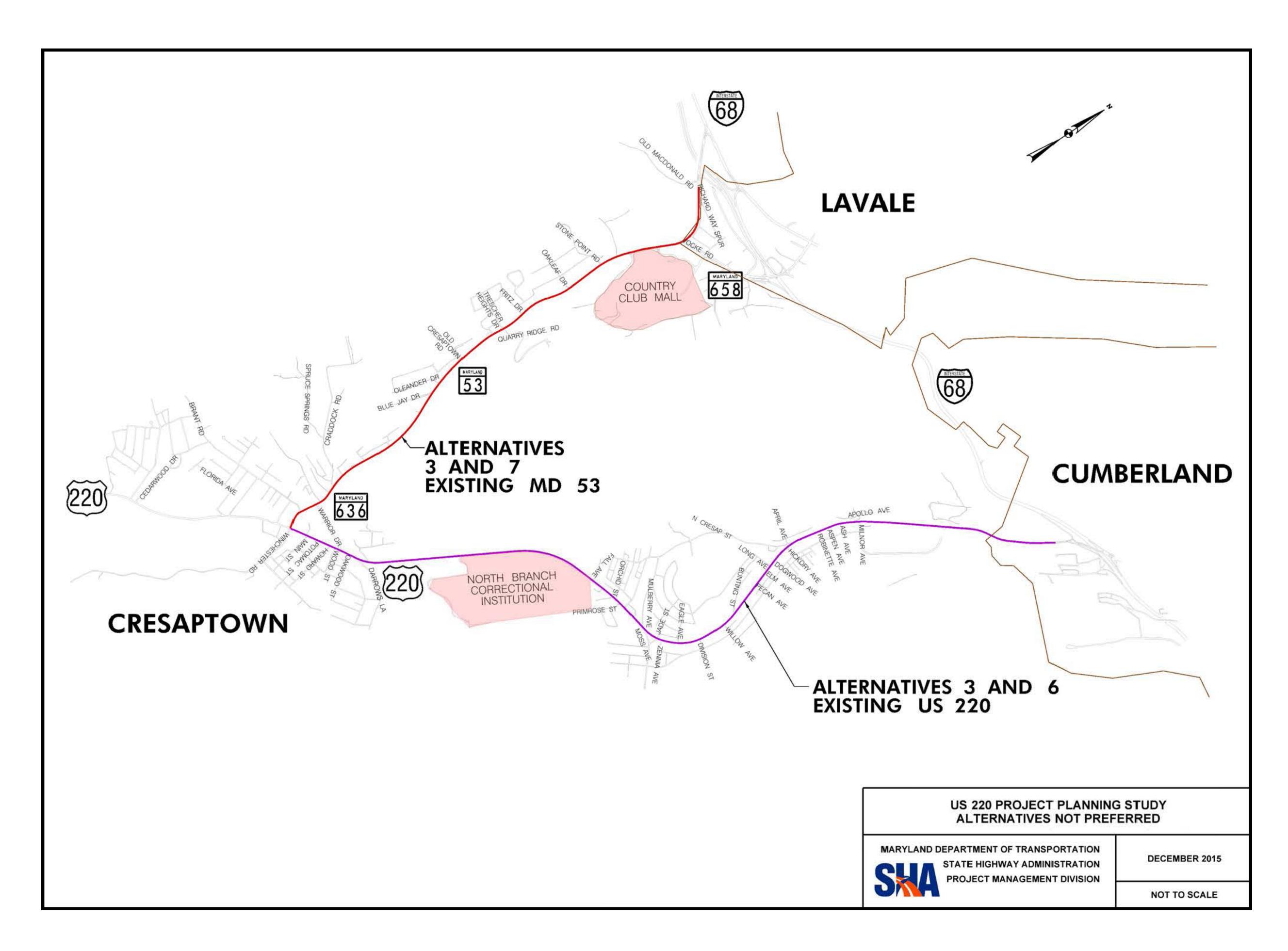








## ALTERNATIVES DROPPED



 Due to the high number of property impacts, the project team recommends that Alternative 3, Alternative 6, and Alternative 7 be dropped from consideration, and not be carried forward into the next stage of detailed study





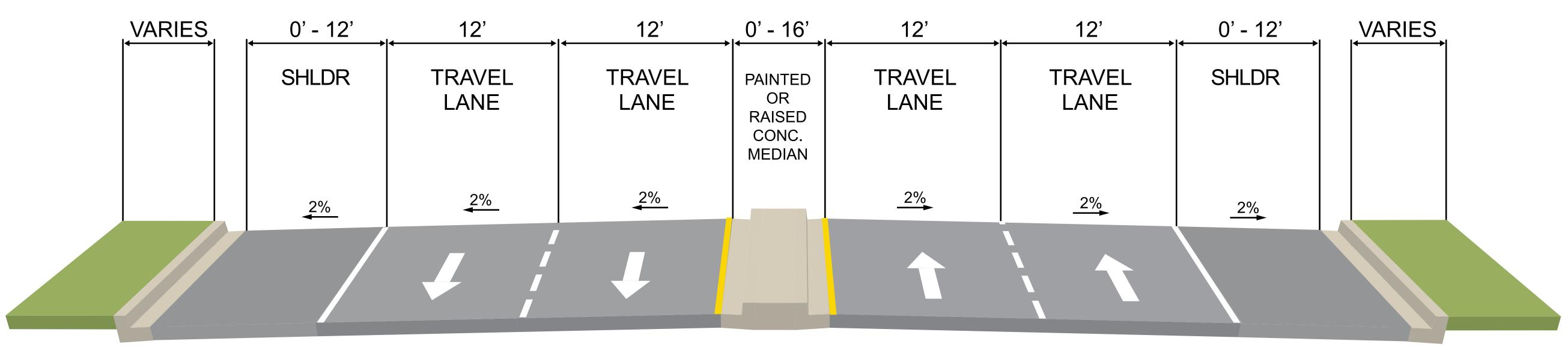


## ALTERNATIVE 1

#### NO BUILD

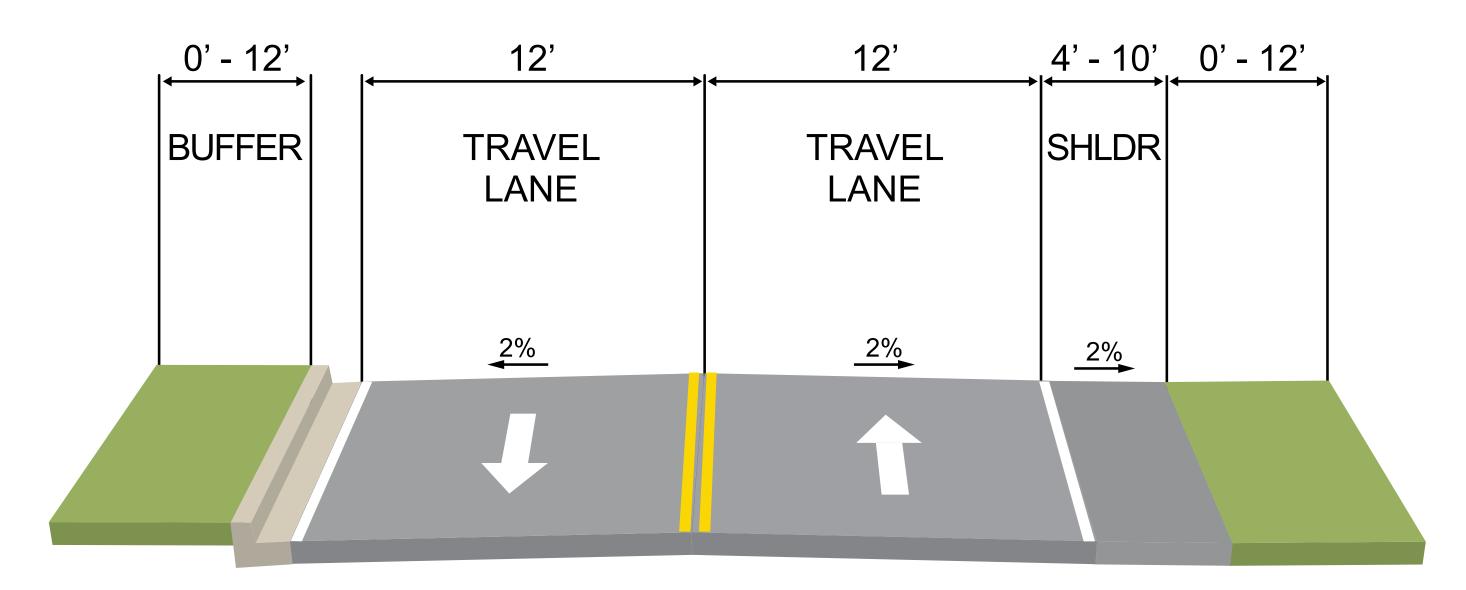
- Minor short-term improvements would occur as part of routine maintenance and safety operations
- Includes installation of traffic control devices at intersections and improvements to traffic operations and safety along US 220, MD 53, MD 636, and MD 658
- Does not address the purpose and need of the project

#### EXISTING TYPICAL SECTIONS



#### NO BUILD MD 53 NORTH OF COUNTRY CLUB MALL RD.

DESIGN SPEED: 30 - 40 MPH



No Build – US 220 and MD 53

DESIGN SPEED: 30 - 40 MPH



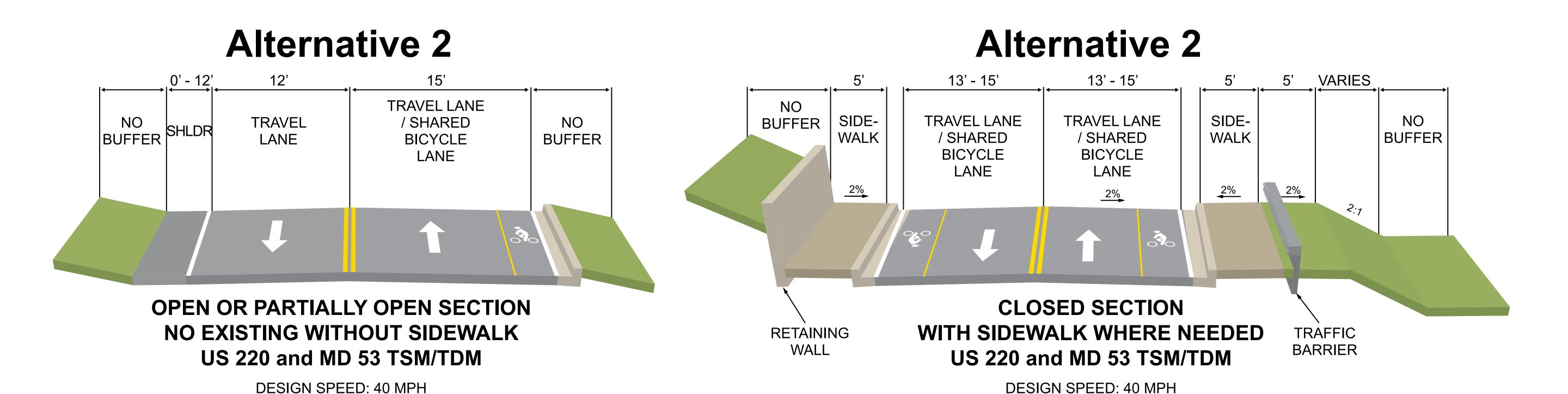




## ALTERNATIVE 2

# TRANSPORTATION SYSTEMS MANAGEMENT / TRANSPORTATION DEMAND MANAGEMENT (TSM/TDM)

- Roadway improvements include consistent travel lanes up to 15 feet wide with curbs (Closed Section), to allow for shared bicycle use; and consistent 12-foot travel lanes and 10-foot shoulders within the non-curbed segments (Open Section)
- Includes intersection improvement options within Cresaptown
- Includes signal timing/traffic control improvements at other signalized intersections along US 220 and MD 53
- Sidewalks will be reconstructed and extended north from Cresaptown and within the Bowling Green vicinity
- Retaining walls will be implemented in a few areas to minimize property and resource impacts







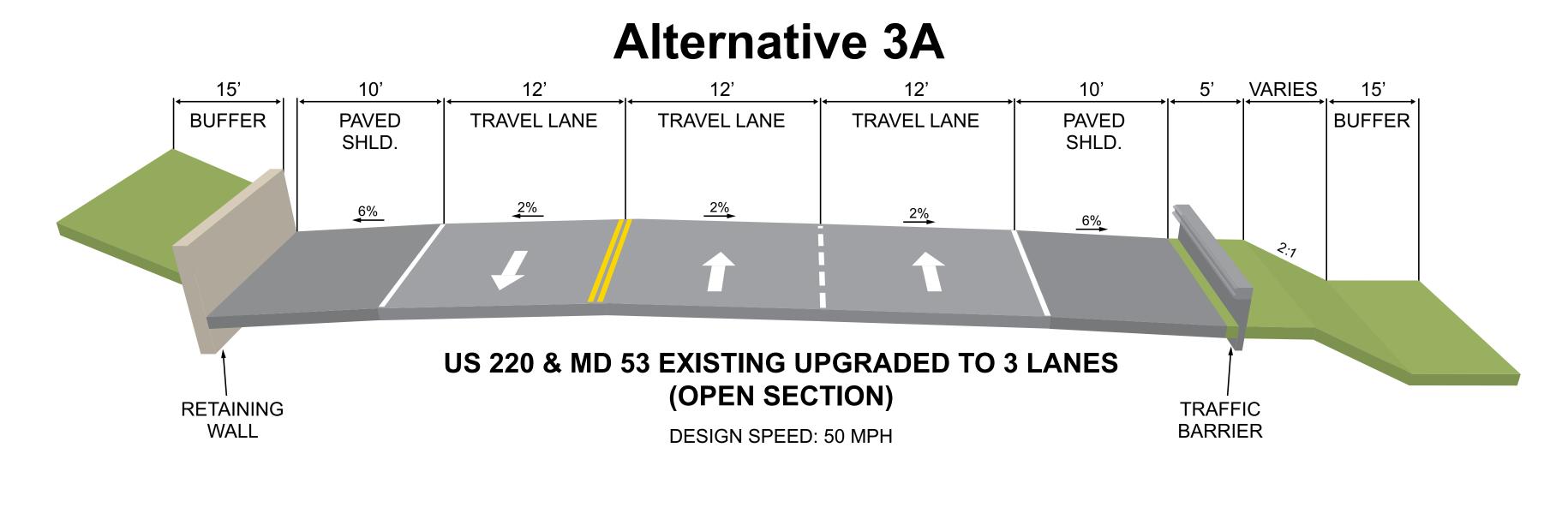


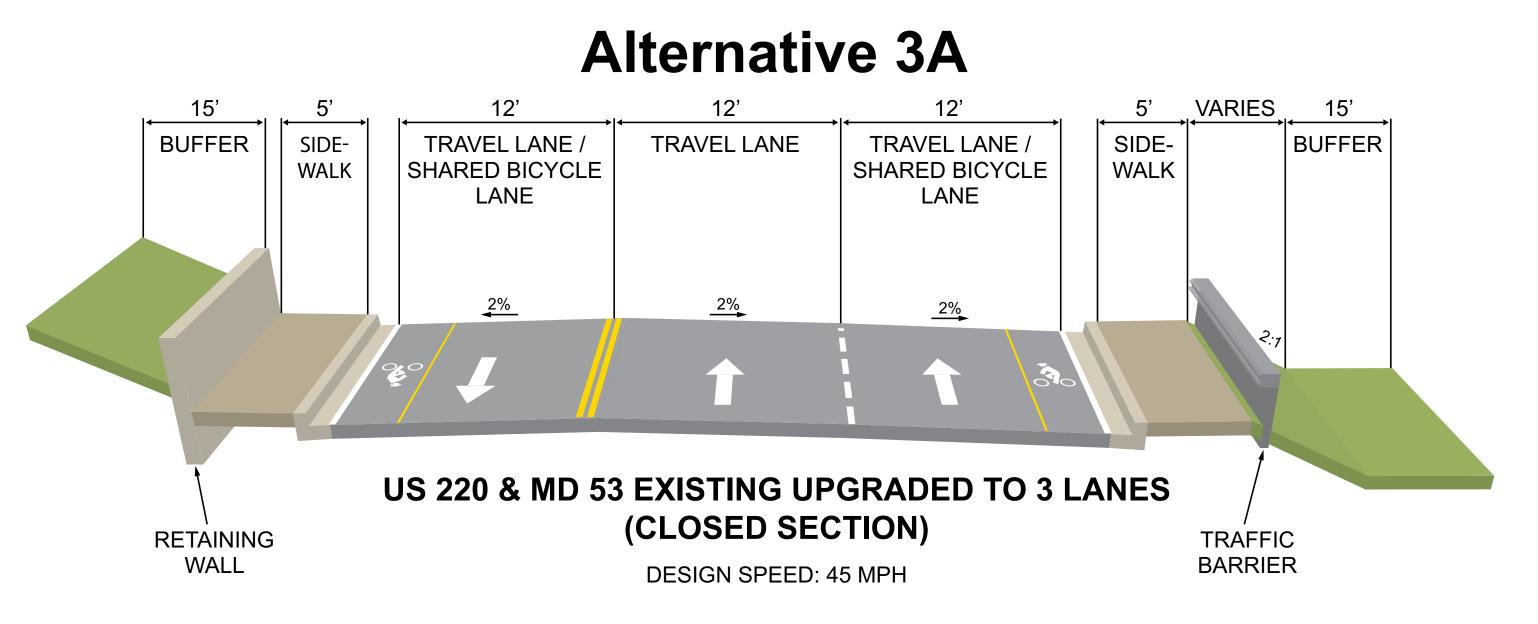
# ALTERNATIVE 3A

# US 220 AND MD 53: UPGRADE TO THREE-LANE UNDIVIDED ROADWAY

#### (PRACTICAL DESIGN APPROACH)

- Provides an additional travel lane northbound on US 220 and an additional travel lane southbound on MD 53 to the US 220 intersection in Cresaptown
- Serves as a split-movement system that adds minimal capacity improvements but improves safety by separating trucks and automobiles, and allows for safer left-turns
- There are varying typical section configurations with segments of closed/curbed sections with sidewalks (Closed Section), and open/non-curbed sections (Open or Partially-Open)
- Retaining Walls will be implemented where needed to avoid residential and business displacements









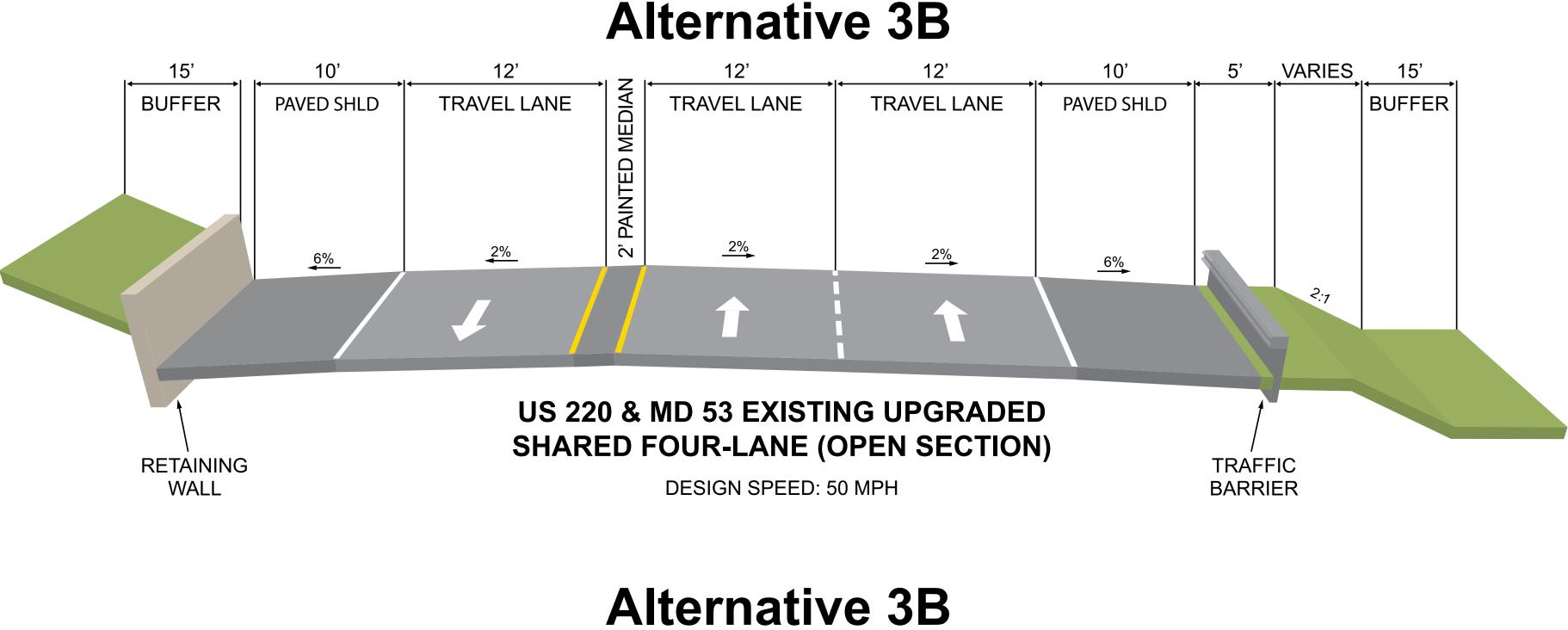


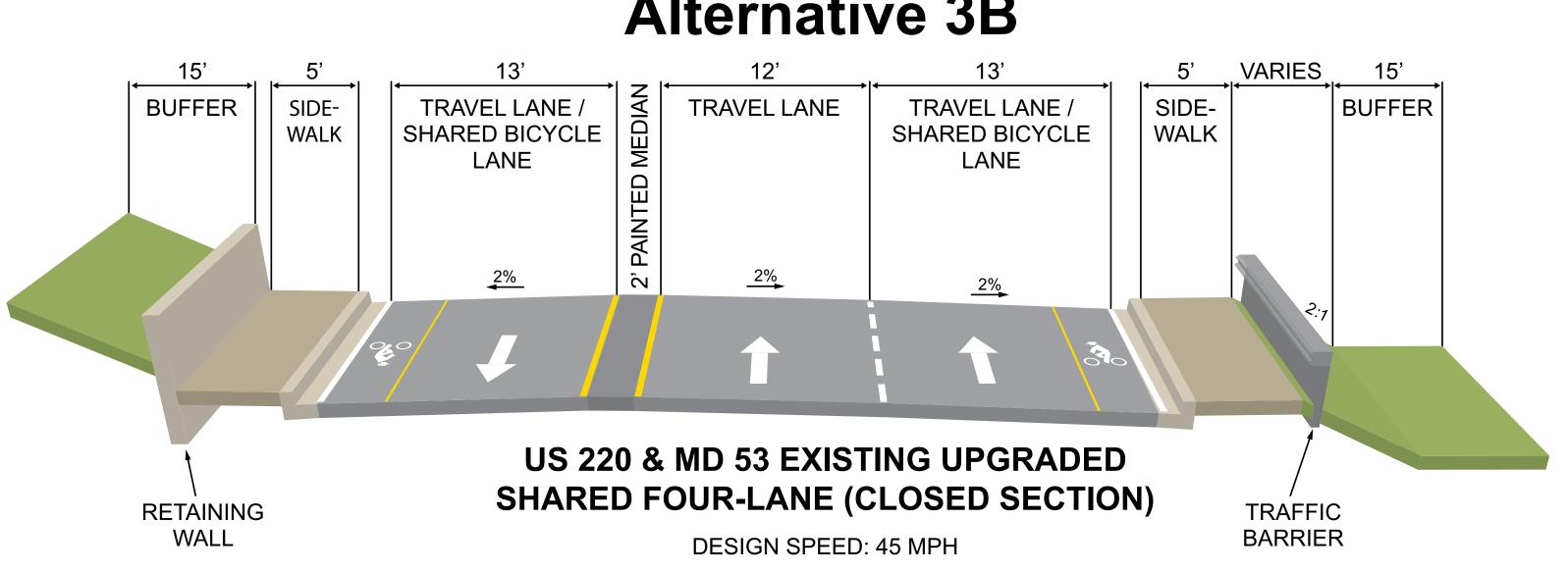
# ALTERNATIVE 3B

# US 220 AND MD 53: SHARED FOUR-LANE CONFIGURATION

#### (PRACTICAL DESIGN APPROACH)

- Similar to Alternative 3A in proposed roadway width (one additional travel lane), curbed sections, sidewalk locations, and retaining wall locations
- The additional 12-foot travel lane will alternate between the northbound and southbound directions along both US 220 and MD 53, with a two to four-foot striped median and transition zone areas
- A center turn-lane will be implemented instead of a travel lane in the more dense urban segments where there are multiple access points and driveways, allowing for safe left-turn movements
- Lane configuration allows for additional passing opportunities







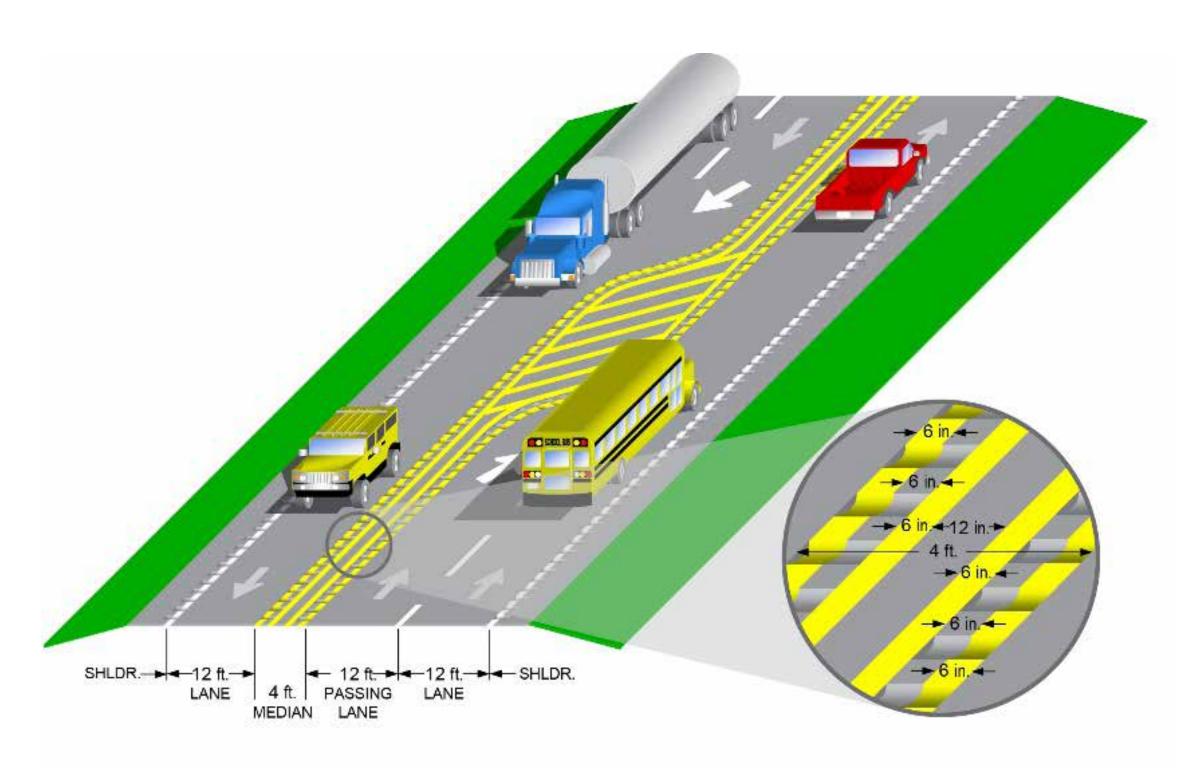






# ALTERNATIVE 3B

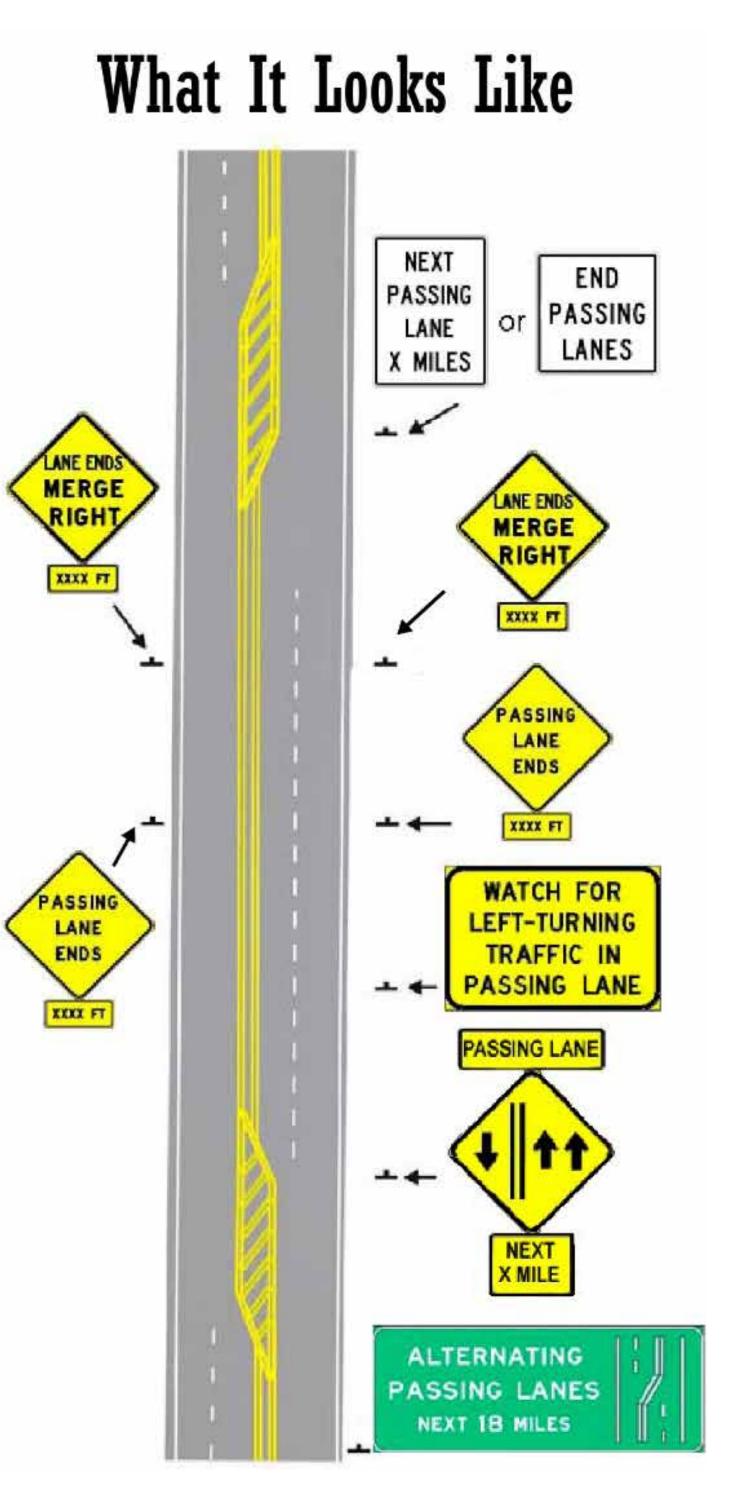
# SHARED FOUR-LANE CONFIGURATION



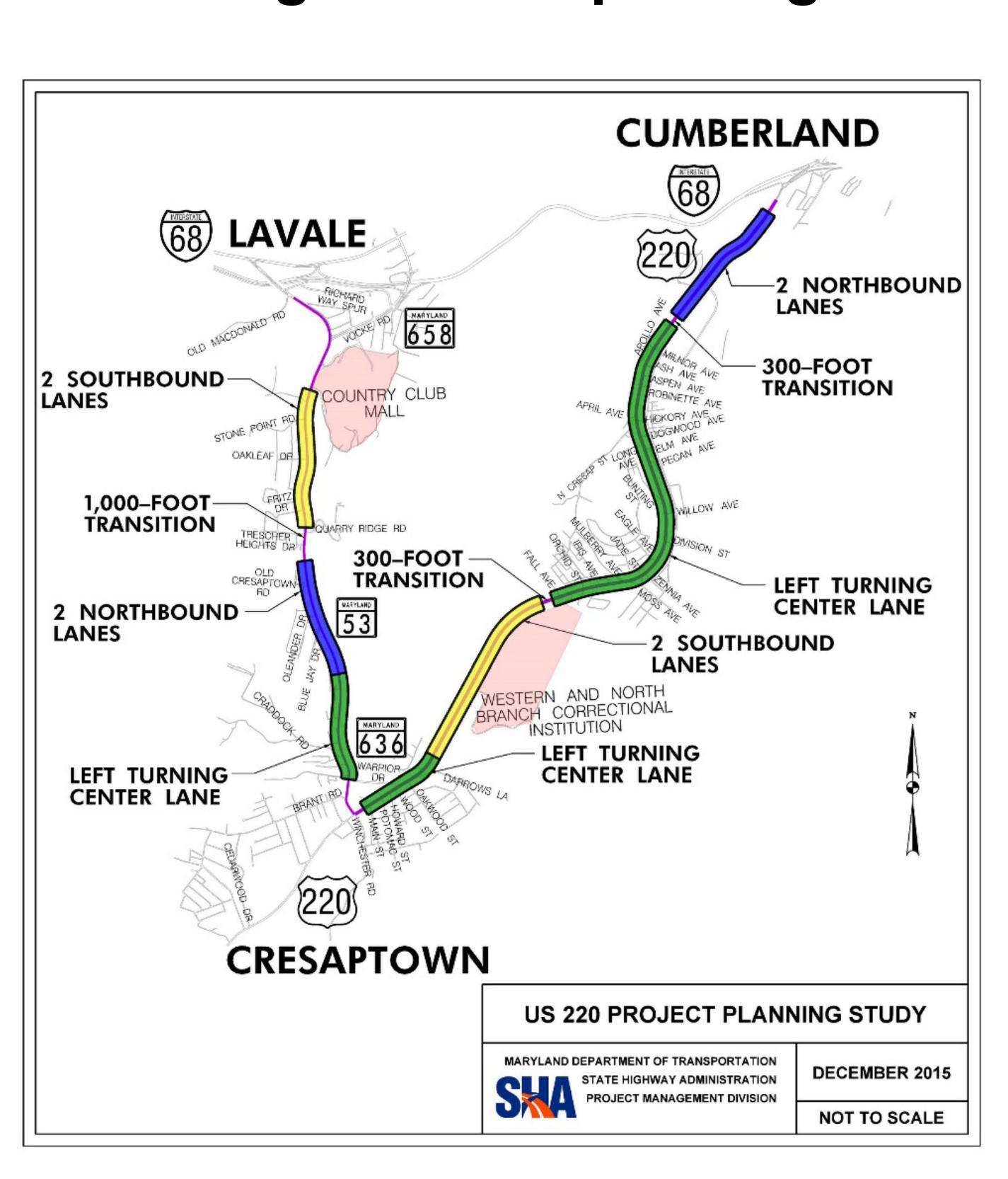
Source: Missouri Department of Transportation

#### Defining "Shared Four-Lane":

- Alternating passing lanes implemented on an existing two-lane highway
- Essentially provides four lanes of capacity on three travel lanes
- Improves mobility and safety by allowing for safer passing



Source: Missouri Department of Transportation





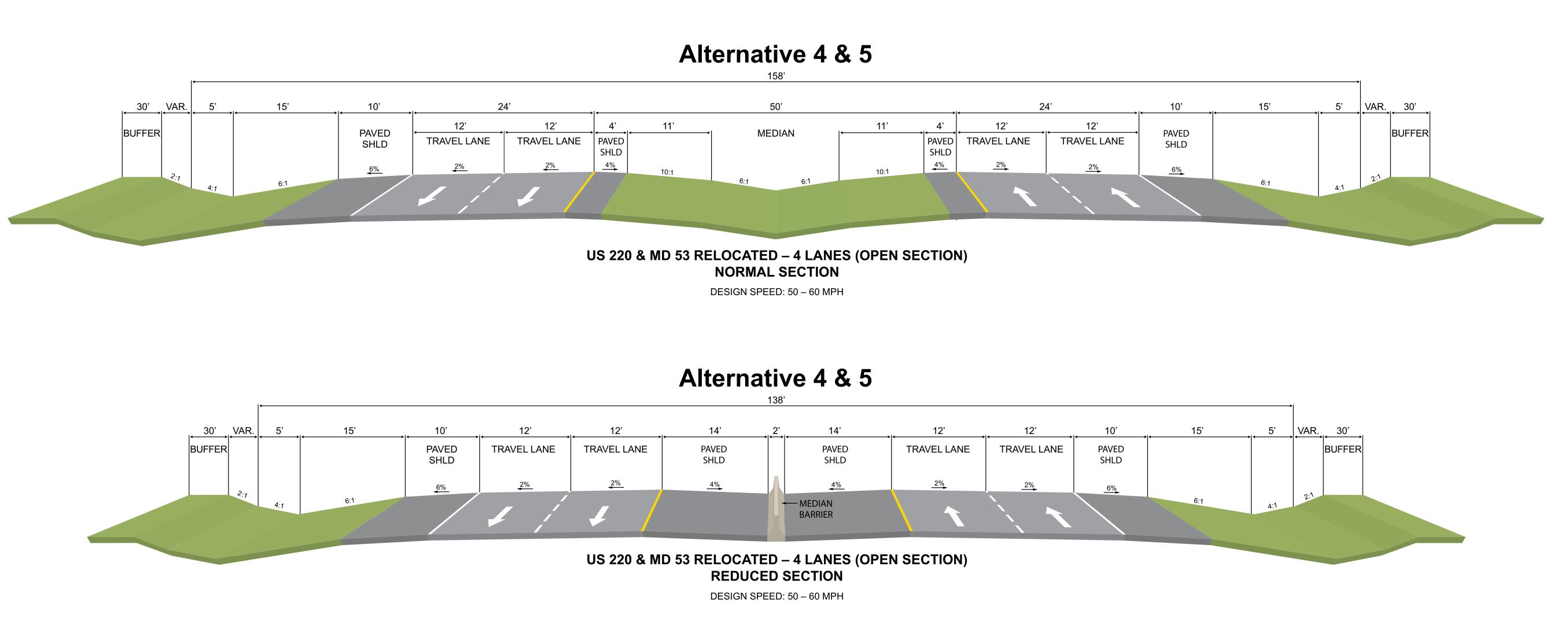




# ALTERNATIVE 4

# US 220 RELOCATED (FOUR-LANE DIVIDED ARTERIAL/HIGHWAY)

- This alternative is a new roadway, parallels existing US 220 to the west, and is comprised of four 12-foot travel lanes with 10-foot wide paved inside and outside shoulders
- Roadway configurations include a depressed grass median (Normal Section) and a reduced-width, median barrier option (Reduced Section) southward to a new at-grade connection with existing US 220
- A new interchange with I-68 would be located approximately 3/4-mile west of the existing interchange with US 220, with new directional and flyover ramps





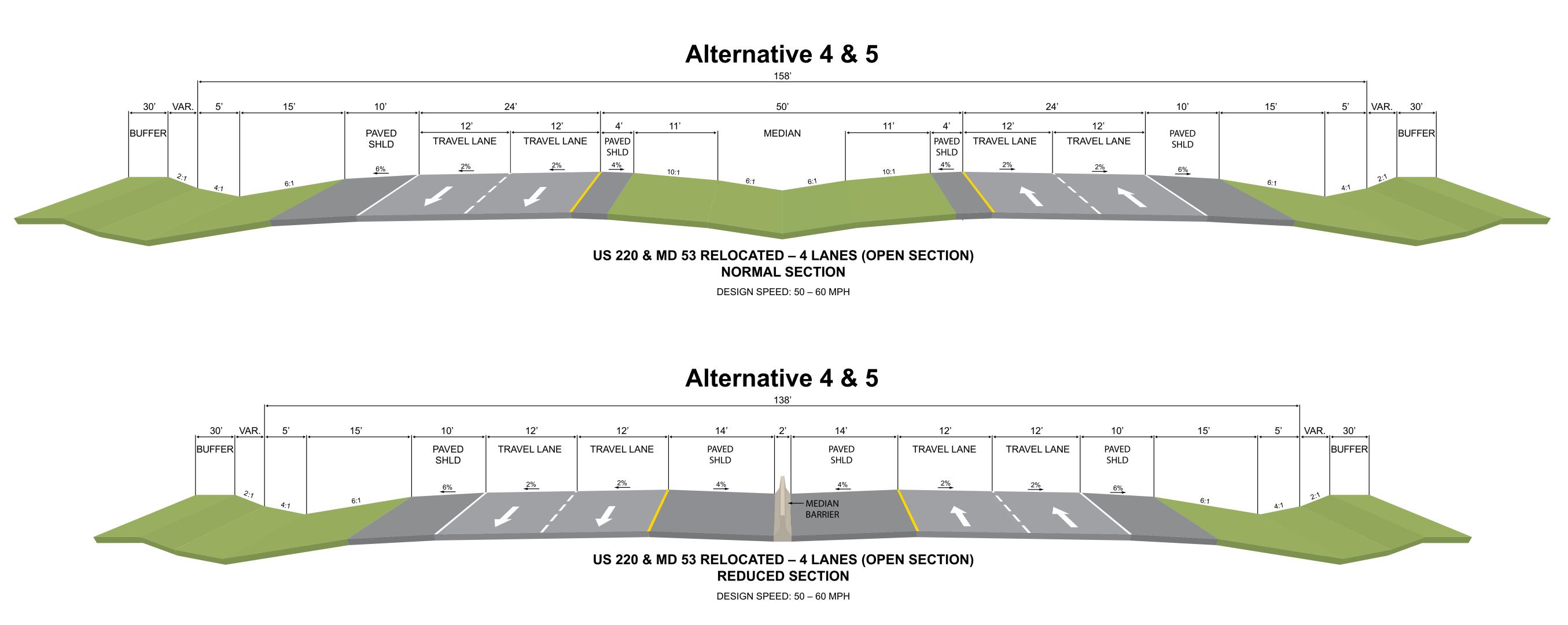




# ALTERNATIVE 5

# MD 53 RELOCATED (FOUR-LANE DIVIDED ARTERIAL/HIGHWAY)

- Alternative 5 is a new roadway, parallels existing MD 53 approximately ½-mile west, and is comprised of four 12-foot travel lanes with 10-foot wide paved inside and outside shoulders
- The roadway would have a depressed grass median (Normal Section) from a new interchange tie-in with I-68 southward to the merge with the Alternative 4 alignment south of the Craddock Road crossing. The roadway then transitions to a reduced-width, median barrier option (Reduced Section)
- The new interchange with I-68 would be located immediately to the west of the existing MD 53 connections to I-68 and would include both directional and flyover ramps, and a direct connection to Vocke Road











# OPTIONS OF THE ALTERNATIVES BEING CONSIDERED

#### CRESAPTOWN INTERSECTION IMPROVEMENTS

- Creates a full-movement intersection at US 220 and MD 53 by adding a northbound lane along MD 53 between US 220 and Brant Road
- Enables large trucks to avoid having to make the skewed left-turn from northbound US 220 to MD 636 (Warrior Road)
- Northbound US 220 is widened at the MD 53 intersection to provide a left-turn lane onto MD 53 and a combined through/right-turn lane along US 220

# I-68 / MD 53 INTERCHANGE CONNECTION IMPROVEMENTS

- Investigating options that would provide safer connections between MD 53 and I-68 if MD 53 ends up being widened south of the Country Club Mall
- Currently analyzing a new interchange ramp that would connect northbound MD 53 to westbound I-68
- Currently analyzing a new ramp connection from eastbound I-68 to southbound MD 53

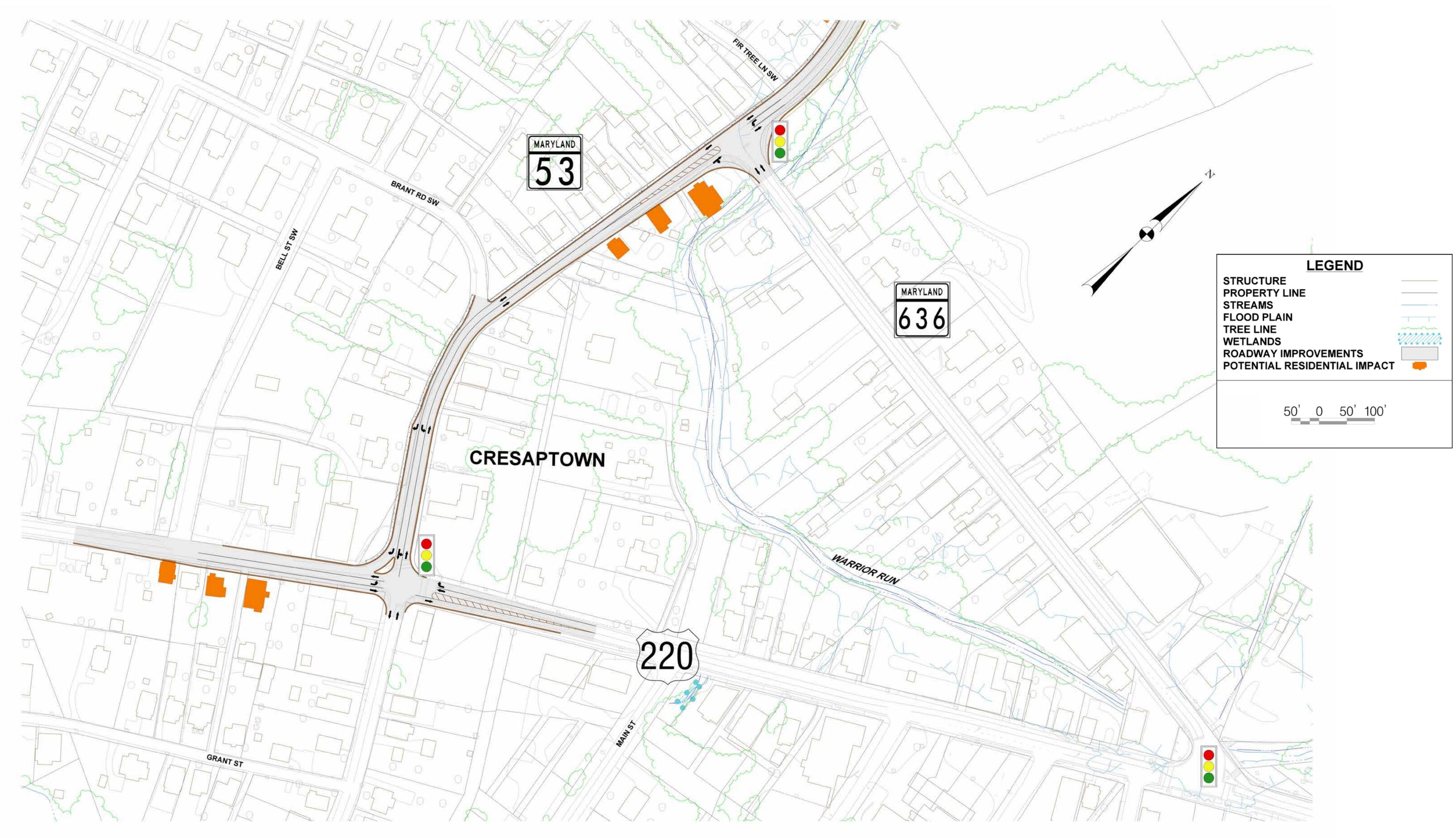








# CRESAPTOWN INTERSECTION IMPROVEMENTS









# PROJECT TEAM NEXT STEPS

- Evaluate your comments and feedback received from this Workshop
- Meet with Allegany County and local officials, and other interested parties
- Mail a project status newsletter by the Spring of 2016